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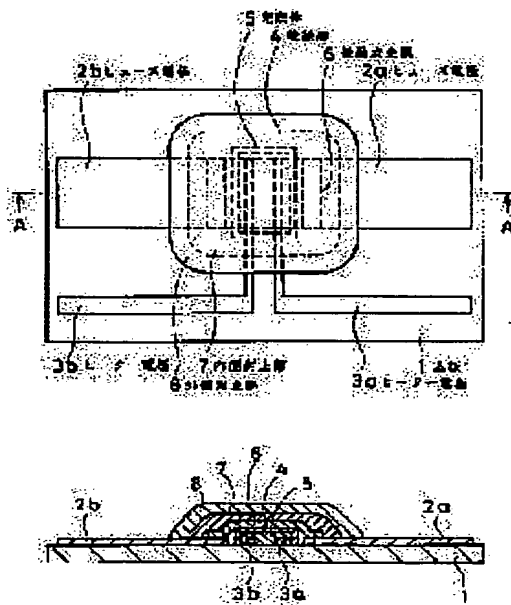
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## (54) PROTECTIVE ELEMENT, MANUFACTURE THEREOF, AND CIRCUIT BOARD

(57)Abstract:

**PURPOSE:** To provide a protective element useful for a variety of fuse resistors for voltage detection, light detection, temperature detection, moisture condensation detection, etc., by providing the protective element comprising low fusing point metal, a heat generation body, and a detection element with a specific constitution.

**CONSTITUTION:** In a protective element comprising desirably plural of low fusing point metals 6. (for example, Bi, P, Sn), a heat generation body 5, and a detection element, desirably a voltage detection element, the low fusing point metals 6 and the heat generation body 5 are brought into contact with each other through an insulation layer 4, and the heat generation body 5 is electrified by the detection element. The heat generation body 5 is preferably composed of a composite comprising thermosetting insulating resin (for example, phenol resin) in which conductive grain (for example, carbon black) is dispersed, and the insulation layer 5 is composed of a composite comprising insulation high polymer (for example, epoxy resin) in which an inorganic substance having high heat conductivity (for example, alumina powder) is dispersed.



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